

California State University, San Bernardino

**CSUSB ScholarWorks**

---

Theses Digitization Project

John M. Pfau Library

---

1998

## Using instructional video to teach a complex motor skill

Amy René Maraska

Karen Drollinger

Follow this and additional works at: <https://scholarworks.lib.csusb.edu/etd-project>



Part of the [Health and Physical Education Commons](#)

---

### Recommended Citation

Maraska, Amy René and Drollinger, Karen, "Using instructional video to teach a complex motor skill" (1998). *Theses Digitization Project*. 1475.

<https://scholarworks.lib.csusb.edu/etd-project/1475>

This Project is brought to you for free and open access by the John M. Pfau Library at CSUSB ScholarWorks. It has been accepted for inclusion in Theses Digitization Project by an authorized administrator of CSUSB ScholarWorks. For more information, please contact [scholarworks@csusb.edu](mailto:scholarworks@csusb.edu).

USING INSTRUCTIONAL VIDEO TO TEACH A COMPLEX MOTOR SKILL

---

A Project  
Presented to the  
Faculty of  
California State University,  
San Bernardino

---

In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
Education: Instructional Technology Option

---

by  
Amy Reneé Maraska  
June 1998

USING INSTRUCTIONAL VIDEO TO TEACH A COMPLEX MOTOR SKILL

---

A Project  
Presented to the  
Faculty of  
California State University,  
San Bernardino

---

by  
Amy Reneé Maraska

June 1998

Approved by:

  
Robert Senour, First Reader

5/20/98  
Date

  
Sylvester Robertson, Second Reader

## ABSTRACT

Research has shown that motor skill performance can be improved with the use of a dynamic visual model that helps to create a cognitive representation and serve as a standard for learning. For example, many physical education teachers and coaches are unable to render an accurate demonstration of the complex motor skill of windmill pitching found in the game of fastpitch softball. The purpose of this project is to produce a demonstration videotape that thoroughly analyzes the basic actions involved with pitching a softball for strikes. This instructional videotape will give physical education teachers and coaches an accurate visual presentation with extra verbal cues to use as a teaching tool. The video will present a case for the use of visual instruction by demonstrating the primary actions of windmill pitching, attempting to motivate the learner, and providing verbal coaching pointers.

## ACKNOWLEDGMENTS

A special thanks to Karen Drollinger for her pitching expertise and patience throughout the production of the video. The video would not have been possible with her help.

My sincere appreciation goes out to Michael Ritz the executive publisher of SCHOLASTIC Coach AND ATHLETIC DIRECTOR Magazine. Pitching skills demonstrated in the video are based on techniques developed by Lisa Fernandez which can be found in Scholastic Coach and Athletic Director, March 1995.

I am also indebted to Mitzi Swentzell, Bruce Wolfe, and the Women's Professional Fastpitch League for their generosity in granting permission to use their promotional commercial in the video production.

And to my camera person, Miss Maury, thank you for doing the job of two. All things are possible!

## TABLE OF CONTENTS

ABSTRACT.....	iii
ACKNOWLEDGMENTS.....	iv
CHAPTER ONE	
Introduction.....	1
CHAPTER TWO	
Review of Literature.....	3
Social Learning Theory.....	3
The Motor Skill of Windmill Pitching.....	6
Instructional Design.....	9
The Use of Video Technology.....	10
CHAPTER THREE	
Methods.....	13
CHAPTER FOUR	
Results.....	16
CHAPTER FIVE	
Discussion.....	17
Recommendations.....	17
Conclusion.....	18
APPENDIX A: Release and Consent Forms.....	20
Talent Release Form.....	21
Permission to Reprint Article.....	22
Permission to Use Commercial.....	23
APPENDIX B: Video Script.....	24
Script.....	25
APPENDIX C: Special Letter.....	32
Letter from Albert Bandura.....	33
REFERENCES.....	34

## CHAPTER ONE

### Introduction

What I Hear, I Forget

What I See, I Remember

What I Do, I Know

Chinese Proverb

More information can be conveyed through a single demonstration than through any other form of communication. Demonstrations are used for instruction of motor skills because visual presentations are thought to offer a way of communicating more directly than by verbal means alone.

The social learning theory attempts to explain how an observer processes information provided by a model in order to learn a complex motor skill. Central to the theory is observational learning. Specifically four subprocesses are believed to govern skill acquisition. These are attention, retention, motor reproduction, and motivation (Bandura, 1997; Rose, 1997). Currently videotape has proven a useful tool for teaching complex motor skills by providing a model of performance during skill acquisition.

The purpose of this project is to create an instructional videotape that demonstrates a complex motor skill--windmill pitching found in fastpitch softball. The subject was chosen because it is an extremely difficult skill that physical education teachers and coaches are often unable to replicate when instructing young athletes. This video

will model the mechanics of windmill pitching for teachers, coaches and players.



## CHAPTER TWO

### Review of Literature

This project integrates physical education and instructional technology; because of this cross-curricular emphasis, literature was reviewed from several different areas. The following cites research and academic articles concerning social learning theory, the motor skill of windmill pitching, instructional design, and the use of video technology.

#### Social Learning Theory

Originally, the social learning theory was intended to explain how an individual acquires social skills and behavior through observation, but is now also being applied to the motor skill domain (Carroll & Bandura, 1982; 1985; 1990). Central to the social learning theory is the idea that both the acquisition and the performance of modeled skills are mediated by cognition. According to the social learning theory, the observer uses this cognitive representation to guide his or her first attempts at reproducing the movement skill. It also serves as a perceptual reference against which to judge the correctness of the ongoing performance so that errors can be corrected. Within the framework of the social learning theory, observational learning employs the four component processes--attention, retention, motor reproduction, and motivation--which govern skill acquisition.

Through observational learning, the observer acquires

new patterns of behavior as a result of watching others. Hence, from a model's demonstration (usually a teacher's) a child-observer learns the "appropriate" way to perform a motor skill or motor sequence (Bandura, 1997). However, mere observation of a teacher's demonstration does not guarantee that the observer will later be able to reproduce the particular demonstrated act (Landers 1978). First, an observer must pay close attention to what was demonstrated. The effectiveness of a demonstration depends on the observer's selective attention to its critical features in order to form a cognitive representation of the skill to be performed (W.R. Carroll & Bandura, 1982; Adams, 1987).

Attention to a modeled behavior is useless if the skill is not remembered; thus, the second process involved in observational learning concerns retention of skills modeled. Sensory stimulation activates sensations that give rise to perceptions of external events as a result of repeated exposure (Bandura, 1997). Modeling stimuli produces enduring, retrievable images of modeled performances. Once modeled activities have been transformed into visual images, these memory codes serve as a cognitive representation that can later be reproduced (Bandura, 1977).

Motor skill production processes come into play when the observer attempts to use his or her cognitive representation to guide enactments. The phases of skill reproduction are cognitive organization of responses, their initiation, monitoring, and refinement on the basis of informative feedback (W.R. Carroll & Bandura, 1982). Some learning can

be achieved by observing the critical features of a demonstration in order to form a cognitive representation of the skill to be performed. However, feedback providing knowledge of one's actual performance plays a key role in learning motor skills (W.R. Carroll & Bandura, 1982; Adams, 1987). Discrepancies between cognitive representation and response execution serve as cues for identifying and correcting errors.

In essence, we cannot expect the observer to perform or reproduce a complex motor skill if he or she does not remember all of it, or does not possess the motor coordination to execute the skill, or is not motivated to do so (Bandura, 1997). Moreover, the observer is more apt to reproduce a model's demonstration if he or she is praised, although reinforcement is not absolutely necessary because some observers are motivated to learn modeled behaviors from powerful models or models of high status (Landers & Landers, 1973; McCullagh, 1976).

Considering the importance of observational learning as a way of acquiring complex motor skills, Holst and Anderson (1992) found that teachers who were instructing students in activities with which the teacher had limited proficiency, resorted to value statements and general feedback almost exclusively. Shape (1993) recommends that a physical education teacher becomes an expert of the skill prior to teaching it in order to give students a correct diagnosis of their performance. Sometimes it is not possible for a teacher and/or coach to become an expert in the complex motor

skill such as windmill pitching; however, having access to an expert model performance is essential. Videotape has provided--and continues to provide--students with visual images of model skill performance. Model performance is indeed critical to student learning and for students' eventual demonstration of competence and proficiency. Videotape is even more effective than film at showing model performances because it is easier to access specific clips on videotape. The use of videotape is especially effective for those skill areas where the teacher's personal skills are not up to the level of model performance (Mohnsen, 1997). A videotape demonstration provides consistent performance to all learners. Physical educators can be reassured that a video demonstration is as effective as a live demonstration (Bandura, Ross & Ross, 1963; Martens, et al., 1976). Moreover, students can view and review the videotape demonstrations at their convenience, and the model demonstrator is not subject to fatigue or potential errors.

#### The Motor Skill Of Windmill Pitching

The pitcher is crucial to success in fastpitch softball. The initiation of activity begins with the pitcher, and a great percentage of winning in fastpitch softball depends upon pitching. The most important requirement in fastpitch play is accuracy or control. The pitcher must have the ability to pitch the ball consistently over the plate and in the strike zone.

One of the foremost authorities on pitching and one of

the greatest softball pitchers to play the game is Lisa Fernandez. Fernandez (1995) states there are four primary actions in pitching: the initial move, turning sideways to the target, the leg drive, and resistance.

Initial Move: In setting up on the rubber, spread your feet shoulder-width apart with the right (pivot/power) foot in the middle of the rubber on an imaginary line running through the middle of the plate, and the toe of the left (stride) foot touching the back edge of the rubber.

Face the hitter with your shoulders square to the plate and with the ball held in both hands in clear view of the hitter.

After taking the sign from the catcher, begin your motion by leaning slightly forward, bending your knees, and shifting your weight onto the ball of your right (pivot) foot, turning it slightly outward to facilitate the body turn.

Now step directly forward with your stride leg and thrust your arms forward and up. Make sure not to over stride or bring your head too far forward, as this will lock up your body and prevent you from putting the full power of the hips behind the flip.

Sideways to Plate: As the arms go forward, straighten your back and rotate your body on the ball of your pivot foot so that you come sideways. Continue circling your throwing arm close to your body while pointing your gloved hand directly at the catcher.

At this point, your body position should resemble an X--with each arm and opposite leg forming a side of the X.

Keep your throwing arm slightly flexed at the elbow as you bring it around close to your head, with the elbow leading the ball. At the same time, keep the legs spread toe to toe on an imaginary line through the middle of the plate.

Note: The stride foot should be pointed at 1:00 or 1:30 o'clock.

Following are the three main reasons why a pitcher should turn sideways to the target:

1. A woman's hips are wider than her shoulders, so that she has to get them out of the way.
2. The sideways position helps produce a smoother arm circle.
3. It also helps the pitcher make greater

use of her hips and legs in producing drive and power.

**Note:** At the top of the arm circle, the pitching hand should be under the ball with the wrist and hand cocked. The fingers will help impart the final flip on the release.

**Leg Drive:** From the X position, you can drive straight off the pivot foot. As the arm begins to swing down, drive the pivot foot (diagonally) toward the heel of the stride foot.

From home plate, it will look as if you have created a figure 4 with your legs while maintaining your sideways position. You must now begin transferring your weight to the inside ball of the stride foot.

The upper body becomes erect and is squaring off with the plate. This will promote a full leg and hip drive.

As the pitching arm comes around, the biceps should pass close to the head and the arm should come down close to your hip, with the palm facing the catcher and the elbow behind the ball.

**Release Point:** Every pitcher has his/her own release point, of course, most look pretty much the same. Remember, as the stride foot hits the ground, the shoulders must be square to the plate with the head centrally located between them.

The pitcher should release the ball on a line with the head, with the hips opening a little as the hand flips the ball to the plate.

**Resistance:** The force of this motion will push you forward as if you were falling, and this is where the resistance comes in. By keeping the stride leg slightly flexed (not locked), you will be able to use it as a shock absorber to check the forward momentum of the body.

Since the pivot foot will follow the drive of the hips, the body will come to an upright position, squared off with the plate.

The back foot will land beside the front foot in a good, balanced position--knees flexed, feet about shoulder-width apart, and toes pointed at the plate--in perfect fielding position.

#### Coaching Pointers

On paper, all this seems pretty complicated, but it is pretty basic stuff--the mechanics needed to throw a softball right down the middle. The four-stage breakdown will make it easy to study each part of the motion and make any corrections and adjustments.

To throw effectively, it is essential to use

the whole body, not just the arm. Strong legs are especially helpful. Because women are generally shorter and not as strong as men, they have to use their whole body to generate optimum power.

It's also important never to get discouraged. Pitching involves a lot of body parts working together, and it doesn't always come naturally. You just can't pick up a ball now and then and expect to pitch it well. You have to do it over and over until it feels comfortable.

Determination, a good work ethic, and not being afraid to fail are the characteristics of a good pitcher. You don't have to be particularly gifted, but you have to be willing to work hard. And that takes practice, practice, practice.

Extra coaching points:

1. Don't bring the head too far forward.
2. In taking the ball back, keep the arm slightly flexed, and allow the elbow to lead the ball.
3. Make sure to have full control of the lower half of the body on the stride.
4. Keep the stride knee flexed as you land to avoid locking up your hips.
5. Follow through straight to the target.
6. Keep your elbow closer than the hand to your body throughout your arm action and especially on the release. (p. 28-30)

### Instructional Design

Instructional design, according to Gagne, Briggs and Wager (1992), is "an arrangement of resources and procedures used to promote learning". The instruction needs to be arranged, or planned, in order to be an effective learning tool (Heinich, Molenda & Russell, 1993). Instructional design consists of three steps: identify goals, develop the instruction, and evaluate the effectiveness (Ronat, 1994, Gagne, Briggs & Wager, 1992).

Gagne' (1985) prescribes a very general instructional model for motor-skills; it includes demonstrations, practice,

and informative feedback as the major strategy components. He points out that for more complex motor skills, such as windmill pitching, it is advantageous to break the motor skill into subcomponents or "part skills" each of which is taught in isolation, followed by instruction in putting them all together. Gagne' also recommends the use of verbal instructions, checklists, and/or pictures (videotaped demonstration) for teaching the learner how to put all the part skills together (Naylor & Briggs, 1963; Fitts & Posner, 1967; Singer, 1980; Gagne' & Briggs, 1979). The instructional method of demonstration involves the learner viewing a real or lifelike example of the skill or procedure being learned, such as an instructional video. Demonstrations are useful when teaching complex motor skills (Heinich, Molenda & Russell, 1993).

#### The Use Of Video Technology

The three phases in the process of producing an instructional video are preproduction, production, and postproduction. Attention to preproduction is the key to beginning the process. Preproduction determines the behavioral objectives the production will address (Gagne, Briggs and Wager, 1992). During preproduction a storyboard--a series of sketches to help visualize and organize the production--is generated which is based on the behavioral objectives (Millerson, 1992). Storyboard frames contain a representation of the visual to be used, the narration for that visual, and any production notes (Heinich, Molenda and



Russell, 1993). Information provided by the storyboard generates a script and a list of shots to be taken (Ronat, 1994). Several things should be kept in mind when selecting camera positions: such as not shooting into the sun and not placing a camera in a position that would result in an unnatural or abrupt switch between shots--reversal of action or a jump cut. In addition, walk through, camera, audio, and talent rehearsals should take place before shooting (Whittaker, 1996). Further, in order to comply with privacy laws, all persons who appear in a video production must sign an Individual Release Agreement (Waters, 1995). This agreement will give the producer permission to use the subject's likeness or image in the video, and will help to avoid legal conflicts once the video has been completed.

To start the actual taping production, the camera operators must be aware of the Rule of Thirds (Millerson, 1992, Ronat, 1995). The Rule of Thirds is a set of guidelines to position people and objects in the frame. In order to create visual compositions that are easy for the eye to comprehend, the frame is divided into three equal rectangles from top to bottom, then into three more from left to right--breaking the frame into nine boxes. When taping action sequences, for example the windmill pitch, the talent must be framed in the first one-third of the frame--leaving space ahead of the talent in the direction the action will be traveling. For example, when the ball leaves the pitcher's hand it doesn't disappear out of the frame and the pitcher's follow through can be seen. A multicamera field production

must adapt to existing conditions. Unpredictable weather, changing sunlight, circular saws, and street noise can interfere with the best-laid plans.

When using a multicamera production, things become much more technically complex. A multicamera field production often involves material that cannot be scripted. The signals from cameras and various pieces of video equipment have to be locked together with a common synchronized signal; the activities of the crew members must be coordinated through one or more production line communications systems; and a central switching and control point must be in place.

Once the program has been recorded on tape, postproduction begins. The most time consuming and critical part of production involves editing which begins with an edit decision list or a time code listing of segments that will be used in creating the final edited version of a production. The assemble editing process involves locating segments one by one, on the tape in the source machine and sequentially recording them on the master tape in the edit recorder. Audio dubbing replaces the native audio sound of a previously recorded tape with a new soundtrack.

Securing written permission to reproduce and/or rebroadcast copyrighted videotaped segments is another important part of the video production (Ronat, 1994).

## CHAPTER THREE

### Methods

The talent was an individual who possessed the complex skill of windmill pitching. She was selected because her level of pitching experience, her knowledge of the skill, and her speaking ability. The article by Lisa Fernandez was given to her with the instruction that she was to incorporate key elements of the article with her own knowledge while demonstrating the skill. Discussions and rehearsals were held as to the order of segments, the subcomponents or "part skills" to be demonstrated in each, the culminating demonstration--putting all the "part skills" together, and stage direction.

A release agreement was obtained for the talent. Written permission to use the Scholastic Coach and Athletic Director article and to rebroadcast the Women's Professional Fastpitch promotional commercial was secured. These documents can be found in Appendix A.

The taping was done in August beginning in midmorning and continuing into early afternoon. This time of day was determined to have the optimal lighting provided by the sun--which was the only lighting used. The location was selected because it was somewhat controlled, secluded and accessible to an electrical source for production equipment. The background was neutral and the foreground was made to simulate an actual softball pitching rubber. The talent was positioned so her pitching arm was closest to the cameras.

Camera One provided the wide shots while Camera Two provided the medium long shots, medium shots, and medium close ups.

An outdoor studio was assembled which included a Panasonic OmniMovie PV-760 VHS camera mounted on tripod, a Sony CCD-TR83 Video 8 Handycam mounted on tripod, two Samsung 13" monitors, one Magnavox 13" monitor, two JVC HR-S5200U S-VHS video cassette recorders, a Panasonic WJ-AVE55 Digital AV Mixer, two Sima lapel microphones, and two Radio Shack Wireless headphones. A ten foot by ten foot shelter was erected to provide coverage and shade for both the director and the equipment.

As the cameras were taping the talent, Camera One, the Panasonic OmniMovie VHS camera, was recording on its own tape. Camera Two, the Hi 8 camera, was recording on a S-VHS VCR as not to lose a generation when transferring from the Hi 8 tape to VHS tape. During the taping the director was switching from Camera One to Camera Two. The two camera signals were mixed--on the fly-- by the Panasonic WJ-AVE55 mixer and recorded on another S-VHS VCR creating a mixed source tape. In other words three tapes were generated-- Camera One source tape, Camera Two source tape, and the recorded mixed source tape. This was done to insure limitless material to be edited due to the fact that this was a one time taping.

The mixed source tape was edited using the assemble editing technique. In addition to the mixed source tape, a source tape with the Women's Professional Fastpitch promotional commercial and a computer generated graphics

source tape were also used. The equipment used in the editing process included two 13' Samsung monitors, two JVC S-VHS VCRs, a Panasonic WJ-AVE55 mixer, Macintosh 7100-66AV, ClarisWorks 2.0.1, and PrintShop Deluxe. During the editing process the slow motion segment was produced by using the jog/shuttle special effects feature on the JVC S-VHS VCR.

During the video dubbing of the Women's Professional Fastpitch commercial, narration was mixed in with the native sound. The slow motion segment narration was audio dubbed replacing the native sound with a new soundtrack. The Ambico V-6310 Audio Mixer and a Sima lapel microphone were used in each audio dubbing situation.

## CHAPTER FOUR

### Results

The result of this project is an eighteen minute fourteen second instructional videotape entitled, "Fast Pitch: The How To Do It Instructional Video". The instructional video includes a motivational introduction, a statement of objectives, a series of demonstrations guiding the learner through the subcomponents of a complex skill, followed by a demonstration and verbal instruction on how to put them all together.

Once viewing the videotape, physical education teachers, coaches, and players will have a cognitive representation to guide their attempts at reproducing the complex skill of windmill pitching. Furthermore, this video will serve as a perceptual reference against which to judge the correctness of the ongoing performance so that errors can be addressed. This videotape will be a valuable tool for physical education teachers and coaches to have available for players of the game for reference.

This form of instructional model on videotape (a series of demonstrations guiding the learner through the subcomponents of a complex skill, followed by a demonstration and verbal instruction on how to put them all together) may be applied to the instruction of other complex motor skills found in other sports. As with this video, the learner may wish to use it for personal improvement through repeated viewing and practice.

## CHAPTER FIVE

### Discussion

#### Recommendations

An outdoor taping or on location taping carries with it a unique set of challenges. As evident in the finished instructional video production, conditions constantly change. Environmental conditions, lighting, audio, and mismatched cameras negatively impacted the finished videotape. Consideration was given to the equipment but little was given to the talent in regard to the heat. Taping midday in August in Southern California may not have been the best choice.

The lighting conditions were optimal early in the taping however, as the day progressed shadows became a problem. The use of reflectors off camera on the dark side of the face, catching the sun to reflect it back, would have created a fill light solving the shadow problem. Another solution would have been to start the taping earlier in the day.

As for audio difficulties, the lapel microphones were positioned toward the talent and mounted on the background. This was done to eliminate any noise created by the talent's movement. Yet, wind noise may have been kept to a minimum had foam "wind screens" been attached to the microphones. Also, a sound check was done prior to the taping and headphones were worn to monitor the audio from both lapel microphones during the videotaping. However, as the editing process began, a noticeable difference between the two microphones became apparent. Even though the microphones

were identical and placed in the same location, the battery in one was apparently weaker thus producing a weaker audio signal. A short test recording should have been performed and played back through the headphones to check for weak audio signals. Another improvement could have been the implementation of a wireless microphone system to increase the reliability of the audio signal to both cameras.

Quality equipment is crucial to a quality production. The use of two different types of cameras made it obvious when switching camera to camera. The ability to synchronize the two cameras, correcting the white balance, would have made the signal from the cameras more consistent--making it appear that the same camera was taping the talent only at different angles.

### Conclusion

The purpose of this project was to produce a demonstration videotape that thoroughly analyzed the basic actions involved with pitching a softball for strikes. An instructional videotape was produced giving physical education teachers and coaches an accurate visual presentation with extra verbal cues. The use of visual instruction--this videotape--can be used as an effective teaching and learning tool because it provides a tireless and consistent model of the complex motor skill of windmill pitching. In addition, this videotape can be used to motivate young players to refine a skill which was once difficult to teach.



This video is based on Observational Learning--learning through observation and imitation--which is incorporated in the Social Learning Theory. This research maintains that complex motor skills can be learned through attention, retention, reproduction, and motivation.

The technique of breaking the motor skill into subcomponents or "part skills" each of which is taught in isolation, followed by instruction in putting them all together is the cornerstone of the instructional design theory which was employed in producing this effective instructional videotape.

**APPENDIX A**  
**Release and Consent Forms**

## TALENT RELEASE FORM

Talent Name \_\_\_\_\_

I hereby consent for value received and without further consideration or compensation to the use (full or in part) of all videotapes taken of me and/or recordings made of my voice and/or written extraction, in whole or in part, of such recordings or musical performance

at \_\_\_\_\_ on \_\_\_\_\_ 19\_\_\_\_\_  
(Recording location) (Month) (Day) (Year)

by \_\_\_\_\_ for \_\_\_\_\_  
(Producer) (Producing organization)

for the purposes of illustration, broadcast, or distribution in any manner.

Talent's signature \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Date \_\_\_\_\_

If the subject is a minor under the laws of the state where modeling, acting, or performing is done:

Legal guardian \_\_\_\_\_ Guardian \_\_\_\_\_  
(Signature) (Please print)

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Date \_\_\_\_\_

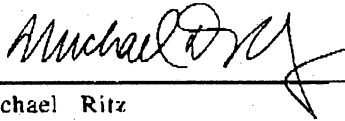
## PERMISSION TO REPRINT ARTICLE

04/23/98 17:54 FAX 212 343 6376

SCHOLASTIC COACH

02

Having full authority to do so, I, Michael Ritz, hereby grant Amy Maraska permission to reprint, in its entirety, the article, "Lisa Fernandez: 'Fast Pitch, How I Do It'" from the March 1995, Volume 64, Number 8 article found in SCHOLASTIC Coach AND ATHLETIC DIRECTOR Magazine. It is my understanding that she will use the article for the sole purpose of completing her Master of Arts project in the field of Education at California State University, San Bernardino.



EXECUTIVE PUBLISHER

4/23/98

Michael Ritz  
SCHOLASTIC Coach AND ATHLETIC DIRECTOR Magazine

Date

## PERMISSION TO USE COMMERCIAL



90 Madison Street, Suite 200 • Denver, Colorado 80206

(303) 316-7800 • FAX (303) 316-2779 • [www.womensprofastpitch.com](http://www.womensprofastpitch.com)

April 20, 1998

Dear Ms. Marska:

This letter allows you to use up to 30 seconds of game footage from the 1997 WPF broadcasts on ESPN2 for educational purposes only. This footage is not allowed to be used in any way that would allow you to profit from the use of the video.

Sincerely,

A handwritten signature in cursive script that reads 'Bruce Wolfe'.

Bruce Wolfe  
Director of Communications



AT&T Wireless Services

APPENDIX B  
Video Script

## SCRIPT

Women's Professional Fastpitch Commercial audio dubbed as follows:

*The pitcher is crucial to success in fastpitch softball. The initiation of activity begins with the pitcher, and a great percentage of winning in fastpitch softball depends upon pitching. The most important requirement in fastpitch is accuracy or control. The pitcher must have the ability to pitch the ball consistently over the plate and in the strike zone.*

(Fade to Black)

(Wipe to Opening Title)

(Fade in and out of black)

*Hi, I'm Karen Drollinger . . .*

*(ad lib introduction of self--background, experience, etc.)*

*This video is designed to better equip physical education teachers and coaches with a visual presentation and extra verbal cues to instruct prospective pitchers. The video will demonstrate the basic actions in windmill pitching, motivate, and provide verbal coaching pointers.*

(Fade to black)

(Cut to Initial Move Title)

(Fade in and out of black)

**Karen's Pre-Pitch Preparation (ad lib)**

*Perfect Circle and grip*

*Power=added body parts*

*Theory of Fulcrum*

*Theory of Force*

**Initial Move**

*In setting up on the rubber, spread your feet shoulder-width apart with the right (pivot/power) foot in the middle of the rubber on an imaginary line running through the middle of the plate, and the toe of the left (stride) foot touching the back edge of the rubber.*

*Face the hitter with your shoulders square to the plate and with the ball held in both hands in clear view of the hitter.*

*After taking the sign from the catcher, begin your motion by leaning slightly forward, bending your knees, and shifting your weight onto the ball of your right (pivot) foot, turning it slightly outward to facilitate the body turn.*

*Now step directly forward with your stride leg and thrust your arms forward and up. Make sure not to over stride or bring your head too far forward, as this will lock up your body and prevent you from putting the full power of the hips*



*behind the flip.*

*(Fade to black)*

*(Cut to Sideways to Plate Title)*

*(Fade in and out of black)*

### **Sideways to Plate**

*As the arms go forward, straighten your back and rotate your body on the ball of your pivot foot so that you come sideways. Continue circling your throwing arm close to your body while pointing your gloved hand directly at the catcher.*

*At this point, your body position should resemble an X--with each arm and opposite leg forming a side of the X.*

*Keep your throwing arm slightly flexed at the elbow as you bring it around close to your head, with the elbow leading the ball. At the same time, keep the legs spread toe to toe on an imaginary line through the middle of the plate.*

*Note: The stride foot should be pointed at 1:00 or 1:30 o'clock.*

*Following are the three main reasons why a pitcher should turn sideways to the target:*

- 1. A woman's hips are wider than her shoulders, so that she has to get them out of the way.*
- 2. The sideways position helps produce a smoother arm circle.*
- 3. It also helps the pitcher make greater use of*

her hips and legs in producing drive and power.

Note: At the top of the arm circle, the pitching hand should be under the ball with the wrist and hand cocked. The fingers will help impart the final flip on the release.

(Fade to black)

(Cut to Leg Drive Title)

(Fade in and out of black)

### **Leg Drive**

From the X position, you can drive straight off the pivot foot. As the arm begins to swing down, drive the pivot foot (diagonally) toward the heel of the stride foot.

From home plate, it will look as if you have created a figure 4 with your legs while maintaining your sideways position. You must now begin transferring your weight to the inside ball of the stride foot.

The upper body becomes erect and is squaring off with the plate. This will promote a full leg and hip drive.

As the pitching arm comes around, the biceps should pass close to the head and the arm should come down close to your hip, with the palm facing the catcher and the elbow behind the ball.

(Fade to black)

(Cut to Release Point Title)

(Fade in and out of black)

### **Release Point**

*Every pitcher has his/her own release point, of course, most look pretty much the same. Remember, as the stride foot hits the ground, the shoulders must be square to the plate with the head centrally located between them.*

*The pitcher should release the ball on a line with the head, with the hips opening a little as the hand flips the ball to the plate.*

(Fade to black)

(Cut to Resistance Title)

(Fade in and out of black)

### **Resistance**

*The force of this motion will push you forward as if you were falling, and this is where the resistance comes in. By keeping the stride leg slightly flexed (not locked), you will be able to use it as a shock absorber to check the forward momentum of the body.*

*Since the pivot foot will follow the drive of the hips, the body will come to an upright position, squared off with the plate.*

*The back foot will land beside the front foot in a good, balanced position--knees flexed, feet about shoulder-width apart, and toes pointed at the plate--in perfect fielding position.*

(Fade to black)

(Cut to Extra Coaching Points Title)

(Fade in and out of black)

(Audio dubbed narration over slow motion segment)

### **Extra Coaching Points**

*Pitching is a skill that can be attained with proper practice. Notice these important aspects of pitching:*

- *Start with both feet on the slab or pitching rubber.*
- *Face the hitter with your shoulders square to the plate and hold the ball in both hands in front of your body.*
- *Begin by leaning slightly forward, shift your weight onto your right or pivot foot.*
- *Step forward and drive with your pivot leg.*
- *Follow through finishing the pitch in a good fielding position.*
- *Make sure that you thrust your arms forward and up.*
- *Turn sideways to the plate and trace the perfect*

arm circle or the big arm circle.

Confidence comes from skill and skill comes from practice. You'll need to develop your timing and rhythm for your wrist snap and leg drive to maximize speed. Your improving skills will help your team. Good luck to you and your teams.

(Fade to black)

(Fade in and out of credits)

(Fade to black)

APPENDIX C  
Special Letter

## LETTER FROM ALBERT BANDURA

STANFORD UNIVERSITY, STANFORD, CALIFORNIA 94305-2130

ALBERT BANDURA  
DAVID STARR JORDAN PROFESSOR  
OF SOCIAL SCIENCE IN PSYCHOLOGY

PHONE: 415-725-2409  
FAX: 415-725-5699  
e-mail: bandura@psych.stanford.edu

January 27, 1997

Amy Maraska, P.E. Specialist  
Cucamonga Elementary School  
8677 Archibald Ave.  
Cucamonga, CA 91730

Dear Ms. Maraska:

The 1986 book *Social Foundations of Thought and Action* is the most detailed review of observational learning. My forthcoming book *Self-Efficacy: The Exercise of Control* also addresses observational learning from a broad perspective. The book is described in the enclosed flier.

All good wishes to you in your research.

Sincerely,



Albert Bandura

AB/pw

Enclosure

## REFERENCES

- Adams, J.A. (1987). Historical Review and Appraisal of Research on the Learning, Retention, and Transfer of Human Motor Skills. Psychological Bulletin, 101 (1), 41-74.
- Bandura, A. (1997). Self-Efficacy The Exercise of Control (pp. 87-92, 370-382). New York: W.H. Freeman and Co.
- Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory (pp. 47-105). Englewood Cliffs, N.J.: Prentice Hall.
- Bandura, A. (1977). Social Learning Theory (pp. 22-55). Englewood Cliffs, N.J.: Prentice Hall.
- Bandura, A., Ross, D., & Ross, S.A. (1963). Imitation of Film-Mediated Aggressive Models. Journal of Abnormal and Social Psychology, 66 (1), 3-11.
- Carroll, W.R. & Bandura, A. (1982). The Role of Visual Monitoring in Observational Learning of Action Patterns: Making the Unobservable Observable. Journal of Motor Behavior, 14 (2), 153-167.
- Carroll, W.R. & Bandura, A. (1985). Role of Timing of Visual Monitoring and Motor Rehearsal in Observational Learning of Action Patterns. Journal of Motor Behavior, 17, 269-281.
- Carroll, W.R. & Bandura, A. (1990). Representational Guidance of Action Production in Observational Learning: A Causal Analysis. Journal of Motor Behavior, 22, 85-97.
- Fernandez, L. (1995). Fast Pitch How I Do It. Scholastic Coach and Athletic Director, 64 (8), 26-30.
- Fitts, P.M., & Posner, M.I. (1967). Human Performance. Monterey, CA: Brooks/Cole.
- Gagne, R. & Briggs, L. (1979). Principles of Instructional Design (pp. 179-181). New York: Holt, Rinehart and Winston.
- Gagne, R. (1985). The Conditions of Learning (4th ed.). New York: Holt, Rinehart and Winston.



- Gagne, R., Briggs, L., Wager, W. (1992). Principles of Instructional Design (pp. 94-95). New York: Holt, Rinehart and Winston.
- Heinich, R., Molenda, M., & Russell, J. (1993). Instructional Media and the New Technologies of Instruction. (pp.3, 5, 233, 256-257). New York, NY: Macmillan Publishing Co.
- Holst, A., Anderson, A. (1992). Feedback: An Important Teaching Function. International Journal Physical Education, 29 (1), 18-25.
- Landers, D. (1978). How, When, and Where to Use Demonstrations: Suggestions for the Practitioner. The Journal of Physical Education and Recreation, 49 (1), 65-67.
- Landers, D.M. & Landers, D.M. (1973). Teacher Versus Peer Models; Model's Presence and Performance Level on Motor Behavior. Journal of Motor Behavior, 5 281-287.
- Martens, R., Burwitz, L., & Zuckerman, J. (1976). Modeling Effects on Motor Performance. Research Quarterly, 47, 277-291.
- McCullagh, P.D. (1976). Model Status and Attention: A Partial Test of Social Learning Theory. Unpublished Doctoral Dissertation, University of Wisconsin.
- Millerson, G. (1992). Video Production Handbook (30, 53, 68, 114-124, 156-181). Oxford, England: Focal Press.
- Mohnsen, B., Thompson, C. (1997). Using Video in Physical Education. Strategies A Journal for Physical and Sport Educators, 10 (6), 8-11.
- Naylor, J.C., & Briggs, G.E. (1963). Effects of Task Complexity and Task Organization on the Relative Efficiency of Part and Whole Training Methods. Journal of Experimental Psychology, 65, 217-224.
- Ronat, W. (1994). Show, Don't Tell: The Making of Training Videos. Videomaker, 9 (3), 62-66.
- Ronat, W. (1995). Compose Yourself. Videomaker, 9 (8), 61-65.
- Shape, T. (1993). What Are Some Guidelines on Giving Feedback to Students in Physical Education? Journal of Physical Education, Recreation and Dance, 64 (9), 13.

Singer, R.N. (1980). Motor Learning and Human Performance (3rd ed.). New York: Macmillan.

Waters, J. (1995). Permits and Permission. Videomaker, 9 (7), 94-100.

Whittaker, R. (1996). Video Field Production (2nd ed.). CA: Mayfield Publishing Company.

Rose, D. (1997). A Multilevel Approach to the Study of Motor Control and Learning (pp. 226-228). MA: Allyn & Bacon.